

Heraeus



**Master Alloy Products
for Jewelry Applications**
首飾業專用母合金產品

Guaranteed Quality, Service, Technology

品質，服務，科技的保證

Quality

As a company with the advanced precious metal technology from Germany, we apply state-of-art procedures in manufacturing along with a modern, well equipped analytical laboratory. Our stringent QC procedures can guarantee the highest standard of our product quality.

Service

A wide range of alloys in different colors and mechanical properties guarantee products for all common karatages and operating conditions. Besides, customer specific product developments are also available. As a manufacturer in the center of Asia, we are uniquely positioned to handle customer demands almost instantly, without having to re-order products from overseas. Fast response times are one of our strengths. Our dedicated and well experienced technical team is always ready to help professionally solving your specific requirements or any problems in the application of our alloys.

Technology

Streamlining our customers' production is one of our utmost important goals. We have therefore established a well-equipped material laboratory and an advanced casting workshop to continuously develop more advanced and user-friendly alloys for our clients. Our workshop has been working closely with the local research institutes and our laboratory in Germany. In depth technical expertise and the state-of-art equipment are seen as a cornerstone for continuous research into new products to benefit our precious clients.



品質保證

作為一間擁有尖端貴金屬技術的德國公司，我們設有完備的化驗室，以最先進的技術及設備作生產。再配合最嚴謹的品質檢定程序，以確保產品的質素能達到最高的標準。

全面服務

我們備有多種適合不同顏色、成色及機械性能的補口。我們更可因應客戶的個別要求，按不同要求而特別研製所需合金，以協助客戶迎合不同的市場。把生產基地設於亞洲中心——香港，除了可有效地管理生產及運送服務外，更使本地製造商無須再經海外訂貨，減輕客戶的營運成本，同時可節省寶貴的時間。一群熱誠又經驗豐富的技術專業團隊，亦隨時樂意為客戶提供技術支援或解決補口應用上的疑難。

優越科技

確保客戶的生產流程暢順是我們極重要的服務承諾之一。因此我們設立一所專門研發和革新的材料實驗室及先進的鑄造工場。冶金師和技術人員會經常和各研究院及德國總部的實驗室作技術交流。同時，我們豐富的技術經驗，不斷研究新產品的宗旨；和一群專業的技術團隊，必然為寶貴的客戶帶來全面的利益。

Master Alloy for White Gold / K 白補口

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Ni Content 鎳含量 | Application 用途 | Hardness 硬度 (HV) | Casting Temperature °C* 熔鑄溫度 °C* | | | | Advantage 優點 |
|-----------------|-------------|-------------|-------------------|-------------------|---------------------|-------------------------------------|------|------|------|-----------------|
| | | | | | | 8K | 10K | 14K | 18K | |
| H-6610A | White 白 | 8-14K | 10% | C, C/S | 125 (9K) | 1080 | 1050 | 1040 | - | LH, LP, XS |
| H-6611 | White 白 | 8-14K | 10% | C, L, R, S, W | 125 (9K) | 1080 | 1050 | 1040 | - | D, LH, LM |
| H-6641 | White 白 | 8-14K | 17% | C, C/S | 165 (10K) | 1080 | 1050 | 1030 | - | LL, LM, LP |
| H-141B | White 白 | 8-14K | 17% | C, C/S | 160 (10K) | 1080 | 1060 | 1030 | - | LL, HF, LP |
| H-6649 | White 白 | 10-18K | 15% | C, L, R, S, W | 140 (14K) | - | 1060 | 1050 | 1040 | D, LL, LP |
| H-102B | White 白 | 10-18K | 17% | C, C/S | 160 (18K) | - | 1070 | 1050 | 1040 | LH, LP |
| H-6606 | White 白 | 10-18K | 20% | C, C/S | 170 (14K) | - | 1080 | 1045 | 1010 | LH, LP |
| H-6606S | White 白 | 10-18K | 20% | C, C/S | 170 (14K) | - | 1080 | 1045 | 1010 | LP, RC |
| H-142 | White 白 | 10-18K | 22% | C, C/S | 172 (14K) | - | 1085 | 1045 | 1000 | HF, LP |
| H-142A | White 白 | 10-18K | 22% | C, C/S | 172 (14K) | - | 1085 | 1045 | 1000 | LH, LP |
| H-6694 | White 白 | 14-18K | 11.80% | C, R | 154 (18K) | - | - | 1050 | 1040 | P (18K), LH, LP |
| H-6693A | White 白 | 14-18K | 17.60% | C, R | 154 (18K) | - | - | 1050 | 1040 | P (18K), LH, LP |
| H-6607A | White 白 | 14-18K | 19% | C, C/S | 170 (14K) | - | - | 1045 | 1050 | LL, LP, RC |
| H-148A | White 白 | 14-18K | 21% | L, R, S, W | 160 (18K) | - | - | 1060 | 1080 | D, LL, LM |
| H-6650 | White 白 | 14-18K | 21% | C, L, R, S | 160 (18K) | - | - | 1060 | 1080 | D, LH |
| H-6688S | White 白 | 14-18K | 24.30% | C, C/S, F | 180 (18K) | - | - | 1070 | 1030 | P (18K), LP, HF |
| H-149 | White 白 | 14-18K | 28% | C, L, R, S | 172 (18K) | - | - | 1050 | 1070 | D, LL, LM |
| H-145 | White 白 | 14-18K | 30% | C | 190 (18K) | - | - | 1060 | 1080 | LL, LP |
| H-145B | White 白 | 14-18K | 30% | C, C/S | 186 (18K) | - | - | 1010 | 1000 | LL, LM, LP |
| H-147A | White 白 | 14-18K | 30% | C, C/S | 182 (18K) | - | - | 1020 | 1000 | D, LH, LM, RC |
| H-107 | White 白 | 14-18K | 35% | C, C/S | 200 (18K) | - | - | 1020 | 1000 | LM, LP, RC |
| H-106B | White 白 | 14-18K | 40% | C | 210 (18K) | - | - | 1050 | 1030 | LH, LP, RC |
| H-143C | White 白 | 18K | 17% | C, C/S | 150 (18K) | - | - | - | 1060 | LH, LL, LP |
| H-106A | White 白 | 18-22K | 64% | C | 220 (18K) | - | - | - | 1060 | LL, LP |

Master Alloy for White Gold (Nickel & Palladium Free) K 白補口 - 不含鎳和鈀

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Application 用途 | Hardness 硬度 (HV) | Casting Temperature °C* 熔鑄溫度 °C* | | | | Advantage 優點 |
|-----------------|-------------|-------------|-------------------|---------------------|-------------------------------------|------|------|-----|-----------------|
| | | | | | 8K | 10K | 14K | 18K | |
| H-889 | White 白 | 8-14K | C, R, C/S | 86 (10K) | 1020 | 1025 | 1030 | - | LM, P |
| H-889H | White 白 | 8-10K | C, R, C/S | 86 (10K) | 1020 | 1025 | - | - | LH, LM, P, XS |
| H-9570A | White 白 | 8-10K | C, R, C/S | 157 (8K) | 1020 | 1000 | - | - | LH, LM, P, XH |
| H-890 | White 白 | 14-18K | L, R, S, W | 160 (18K) | - | - | 980 | 950 | LM, LP, P, XH |

Master Alloy for Nickel Free White Gold (Contains Palladium) 無鎳 K 白補口 - 含鈀

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Pd Content 鈀含量 | Application 用途 | Hardness 硬度 (HV) | Casting Temperature °C* 熔鑄溫度 °C* | | | | Advantage 優點 |
|-----------------|-------------|-------------|-------------------|---------------------------------|---------------------|-------------------------------------|------|------|------|-------------------|
| | | | | | | 8K | 10K | 14K | 18K | |
| H-310A | White 白 | 8-14K | 15% | C, R | 73 (10K) | 1170 | 1150 | 1140 | - | LP, P, RC |
| H-310C | White 白 | 8-14K | 10% | C, R | 120 (8K) | 1170 | 1150 | 1140 | - | LP, P, RC, XH |
| H-3000 | White 白 | 10-14K | 26.4% | C, L, R, S | 74 (18K) | - | 1210 | 1190 | - | LL, LP, P |
| H-9304 | White 白 | 14-18K | 32% | C, L, R, S | 70 (18K) | - | - | 1230 | 1215 | LL, LP, P |
| H-9305 | White 白 | 14-18K | 40% | C, L, R, S | 85 (18K) | - | - | 1240 | 1250 | LL, LP, P, RC, XH |
| H-9307A | White 白 | 14-18K | 32%, 8%Pt | C, R | 120 (18K) | - | - | 1220 | 1200 | EP, LP, P, XH |
| H-9308 | White 白 | 18K | 30% | C, C/S | 131 (18K) | - | - | - | 1050 | LH, LM, P, XH |
| H-800 | White 白 | 8-18K | 0% | Pre-alloy for Pd, C, L, R, W, S | 80-90 | - | - | - | - | A, P, RC |
| H-802 | White 白 | 8-18K | 0% | Pre-alloy for Pd, C, L, R, W, S | 90-120 | - | - | - | - | EP, LM, P, RC, XH |

Master Alloy for Yellow Gold / K 黃金補口

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Application 用途 | Hardness 硬度 (HV) | Casting Temperature °C* 熔鑄溫度 °C* | | | | Advantage 優點 |
|-----------------|--------------------------|-------------|-------------------|---------------------|-------------------------------------|------|------|------|-------------------|
| | | | | | 10k | 14k | 18k | 22k | |
| H-112B | Light Green Yellow / 淺青黃 | 8-14K | C, C/S | 120 (14K) | 970 | 960 | - | - | F, LH, LM |
| H-112R | Light Green Yellow / 淺青黃 | 8-14K | C, L, S, W | 102 (14K) | 970 | 960 | - | - | HF, RC |
| H-126 | Pink Yellow / 粉紅黃 | 8-14K | C, C/S | 115 (14K) | 1000 | 980 | - | - | LH, LL, LP, RC |
| H-126R | Pink Yellow / 粉紅黃 | 8-14K | C, L, S, W | 115 (14K) | 1000 | 980 | - | - | LL, LP, RC |
| H-136A | Green Yellow / 青黃 | 8-14K | C, C/S | 124 (14K) | 970 | 955 | - | - | F, HF, LL, LP, RC |
| H-136D | Green Yellow / 青黃 | 8-14K | C, L, S, W | 124 (14K) | 970 | 955 | - | - | LL, LP, RC |
| H-139 | Green Yellow / 青黃 | 8-14K | C, C/S | 128 (14K) | 975 | 955 | - | - | F, HF, LL, LP, RC |
| H-111 | Deep Yellow / 深黃 | 8-14K | C, C/S | 124 (14K) | 980 | 965 | - | - | HF, LH, LP, RC |
| H-111R | Deep Yellow / 深黃 | 8-14K | C, L, S, W | 124 (14K) | 980 | 965 | - | - | HF, LP, RC |
| H-210 | Pale Yellow / 淺黃 | 8-14K | C, C/S | 124 (14K) | 970 | 960 | - | - | F, HF, LP, RC |
| H-160A | Deep Yellow / 深黃 | 8-14K | C, C/S | 145 (14K) | 960 | 950 | - | - | D, LL, LP, RC, XH |
| H-160D | Deep Yellow / 深黃 | 8-14K | C, L, S, W | 144 (14K) | 960 | 950 | - | - | HF, LL, LP, RC |
| H-134 | Yellow / 黃 | 10-14K | C, F, C/S | 127 (14K) | 970 | 955 | - | - | LP, RC |
| H-155R | Pink Yellow / 粉紅黃 | 10-18K | C, L, S, W | 162 (18K) | 1075 | 1020 | 1000 | - | RC |
| H-186 | Green / 青金 | 10-18K | C, C/S, R | 120 (18K) | 1010 | 1000 | 990 | - | F, LL, LP |
| H-188B | Green Yellow / 青黃 | 10-18K | C, C/S | 136 (18K) | 925 | 920 | 915 | - | F, HF, RC |
| H-188D | Green Yellow / 青黃 | 10-18K | C, L, S, W | 133 (18K) | 925 | 920 | 915 | - | LL, LP |
| H-191A | Light Yellow / 淺黃 | 14K | C, C/S | 130 (14K) | - | 960 | - | - | HF, LP, RC |
| H-169 | Green Yellow / 青黃 | 18K | C, C/S | 140 (18K) | - | - | 970 | - | F, HF, LP |
| H-172 | Red Yellow / 紅黃 | 18K | C, C/S, R | 132 (18K) | - | - | 950 | - | D, LL, LP, RC, XH |
| H-176A | Deep Yellow / 深黃 | 18K | C, C/S | 138 (18K) | - | - | 980 | - | F, HF, LL, LP, RC |
| H-176R | Deep Yellow / 深黃 | 18K | C, L, S, W | 135 (18K) | - | - | 980 | - | D, LP, RC |
| H-177B | Yellow / 黃 | 18K | C, C/S | 132 (18K) | - | - | 975 | - | EP, F, LL, LP, RC |
| H-177R | Yellow / 黃 | 18K | C, L, S, W | 132 (18K) | - | - | 975 | - | D, HF, LL, LP |
| H-179B | Green Yellow / 青黃 | 18K | C, C/S, L, S, W | 128 (18K) | - | - | 990 | - | D, HF, LL, LP, RC |
| H-180B | Deep Yellow / 深黃 | 18-22K | C, R | 87 (22K) | - | - | 1050 | 1070 | F, LL, LP, XS |
| H-222 | Deep Yellow / 深黃 | 21-22K | C, R | 88 (22K) | - | - | - | 1075 | F, LL, LP, XS |
| H-225 | Yellow / 黃 | 21-22K | C, R | 132 (22K) | - | - | - | 1075 | F, LL, LP, XS |
| H-226 | Green Yellow / 青黃 | 21-22K | C, R | 125 (22K) | - | - | - | 1080 | F, LL, LP, XS |

Master Alloys for Red Gold / K 紅金補口

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Application 用途 | Hardness 硬度 (HV) | Casting Temperature °C* 熔鑄溫度 °C* | | | | Advantage 優點 |
|-----------------|------------------|-------------|-------------------|---------------------|-------------------------------------|------|------|-----|-------------------|
| | | | | | 10K | 14K | 18K | 22K | |
| H-127 | Light Red / 淺紅 | 10-18K | C | 165 (18K) | 1070 | 1015 | 1015 | - | D, HF, LL, RC |
| H-128 | Pink / 粉紅 | 10-18K | C | 164 (18K) | 1075 | 1015 | 1020 | - | D, HF, LL, RC |
| H-128I | Pink / 粉紅 | 10-18K | C | 166 (18K) | 1075 | 1015 | 1020 | - | D, HF, LL, RC |
| H-152 | Light Pink / 淺粉紅 | 10-18K | C, C/S, R | 162 (18K) | 1075 | 1020 | 1000 | - | D, HF, LL, RC |
| H-153F | Red / 紅 | 10-18K | C, L, R, S, W | 166 (18K) | 1075 | 1020 | 1020 | - | D, LH, LP, RC |
| H-153G | Red / 紅 | 10-18K | C | 166 (18K) | 1075 | 1020 | 1020 | - | RC, LH, A, LL, HF |
| H-751 | Pink / 粉紅 | 10-18K | C, F | 166 (18K) | 1075 | 1020 | 1020 | - | RC |
| H-852F | Deep Pink / 深粉紅 | 10-18K | C, F, R | 166 (18K) | 1075 | 1020 | 1020 | - | A, D, RC |
| H-852G | Deep Pink / 深粉紅 | 10-18K | C, F | 166 (18K) | 1075 | 1020 | 1020 | - | A, RC |
| H-853F | Deep Pink / 深粉紅 | 10-18K | C, F, R | 166 (18K) | 1075 | 1020 | 1020 | - | A, D, RC |
| H-853G | Deep Pink / 深粉紅 | 10-18K | C, F | 166 (18K) | 1075 | 1020 | 1020 | - | A, RC |

Sterling Silver and its Master Alloys 925 銀及補口

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Application 用途 | Hardness 硬度 (HV) | Casting Temperature °C* | Advantage 優點 | |
|-----------------|-------------|-------------|-------------------|---------------------|-------------------------|-----------------|----------------------|
| Silver 銀 | Alloys 補口 | | | | | | |
| O-AAG | H-PAT | White 白 | 925Ag | C, R, C/S, L, S, W | 55 | 960 - 980 | A, D, HT, LH, LP, LR |
| O-BAG | H-336 | White 白 | 925Ag | C, R, C/S, L, S, W | 55 | 960 - 980 | A, EP, F, HT, LR, RC |
| O-CAG | H-220 | White 白 | 925Ag | C, R, C/S, L, S, W | 60 | 960 - 980 | D, HT, LH, LL |
| O-DAG | H-330A | White 白 | 925Ag | C, R, C/S, L, S | 55 | 960 - 980 | A, F, HT, LR, RC |
| O-FAG | H-430 | White 白 | 925Ag | C, R, C/S, L, S | 54 | 960 - 980 | A, F, HF, LR, RC |
| O-HAG | H-555 | White 白 | 925Ag | C, R, C/S, L, S | 65 | 960 - 1020 | HT, LR |
| O-JAG | H-633 | White 白 | 925Ag | C, R, C/S, L, S, W | 65 | 960 - 1000 | A, D, F, HF, HT, LL |
| O-MAG | H-640 | White 白 | 925Ag | C, C/S | 65 | 960 - 1000 | A, F, EP, HF, LR |
| O-SAG | H-550 | White 白 | 925Ag | C, R, C/S, L, S, W | 70 | 960 - 1020 | A, EP, F, LP, RC, XH |
| O-ZAG | H-449 | White 白 | 925Ag | C, R, C/S, L, S | 53 | 960 - 1000 | A, F, HF, LR, RC |
| H-PS | - | Pink / 粉紅 | 50% | C, R, S | 135 | 940 - 960 | Color Silver |

Master Alloy for Solders (Cadmium Free) 焊料補口 (不含鎘)

| Alloy no. 型號 | Color 顏色 | Karat 成色 | Type 種類 | Soldering Temperature °C 焊接溫度 °C | Remark 備註 |
|-----------------|-------------|---------------|-------------|-------------------------------------|---------------------|
| S-510 | White / 白 | 14K | Easy / 低焊 | 745 - 755 | Mix with Gold / 需加金 |
| S-560 | White / 白 | 18K | Medium / 中焊 | 840 - 850 | Mix with Gold / 需加金 |
| S-520 | Yellow / 黃 | 14K | Easy / 低焊 | 745 - 755 | Mix with Gold / 需加金 |
| S-530 | Yellow / 黃 | 18K | Easy / 低焊 | 755 - 765 | Mix with Gold / 需加金 |
| S-589 | Pink / 粉紅 | 14K | Easy / 低焊 | 843 - 849 | Mix with Gold / 需加金 |
| S-AgE | White / 白 | 925Ag / 925 銀 | Easy / 低焊 | 700 - 710 | Direct use / 可直接使用 |
| S-AgM | White / 白 | 925Ag / 925 銀 | Medium / 中焊 | 715 - 725 | Direct use / 可直接使用 |
| S-AgH | White / 白 | 925Ag / 925 銀 | Hard / 高焊 | 765 - 775 | Direct use / 可直接使用 |

Brass 黃銅

| Alloy no. 型號 | Color 顏色 | Application 用途 | Hardness (HV) 硬度 | Melting Temp °C* 熔融溫度 °C* | Advantages 優點 |
|-----------------|----------------------|-------------------|---------------------|------------------------------|------------------|
| H-JSBR | Yellow / 黃 | C, C/S, R | 72 | 1100 - 1120 | F, LL, LP |
| H-JTBR | Yellow / 黃 | C, C/S, R | 72 | 1080 - 1100 | A, F, HF, LP, RC |
| H-JBZ3 | Pinkish Yellow / 粉紅黃 | C | 125 | 1080 - 1020 | HF, LP |
| H-JBZ10 | Pinkish Yellow / 粉紅黃 | C | 125 | 1080 - 1020 | HF, LP |
| H-JBRZ3 | Yellow / 黃 | C, F | 80 | 1080 - 1100 | HF, LP |
| H-JBRZ5 | Yellow / 黃 | C, F | 80 | 1080 - 1100 | HF, LP |
| H-GS150 | White / 白 | C, R | 138 | 1200 | RC |
| H-GS180 | White / 白 | C, R | 159 | 1170 | RC |
| P-667 | Yellow / 黃 | C, C/S, R | 77 | 1100 - 1120 | F, HF, LH |
| P-850 | Pink / 粉紅 | C, C/S, R | 66 | 1100 - 1120 | F, LL, LP, SC |
| P-900 | Pink / 粉紅 | C, C/S, R | 66 | 1120 - 1150 | F, LL, LP, SC |

A = Anti-tarnishing / 防變黑

C = Casting / 鑄造

C/S = Casting with stones / 蠟鑲

D = Very ductile / 高延展性

EP = Ease to polish / 易打磨

F = Torch melting / 火槍熔鑄

HF = High fluidity / 高流動性

HT = Heat treatable / 可熱處理

L = Lamination / 壓片

LH = Less hard spot / 硬點少

LL = Low melt loss / 低損耗

LM = Low melting point / 低熔點

LP = Less porosity / 砂孔少

LR = Less fire-scales / 減少紅印

P = Pass EN1811:2011 / 通過 EN1811:2011 測試

R = Hand-making / 手造

RC = High recasting rate / 高覆金率

S = Stamping / 沖壓

SC = Casting with silver / 配合純銀使用

W = Wiring / 拉線

XH = Extra hard / 加硬

XS = Extra soft / 特軟

* Suggested temperature range for casting $\pm 25^{\circ}\text{C}$ * 建議熔鑄溫度差別為 $\pm 25^{\circ}\text{C}$

Latest Update : August 2014

Heraeus Ltd.

Main Office

Heraeus Technology Centre
30 On Chuen Street
On Lok Tsuen, Fanling
N.T., Hong Kong, P.R.C.
Phone + 852 2675 1200
Fax + 852 2682 3220
smt.hlh@heraeus.com
www.heraeus.com.hk

Hunghom Office

Rm 2111-2113
21/F, Peninsula Square
18 Sung On Street, Hunghom
Kln., Hong Kong, P.R.C.
Phone + 852 2159 5960
Fax + 852 2773 1090

賀利氏有限公司

總辦事處

中國香港新界
粉嶺安樂村
安全街 30 號
賀利氏科技中心
電話 + 852 2675 1200
傳真 + 852 2682 3220
smt.hlh@heraeus.com
www.heraeus.com.hk

紅磡辦事處

中國香港九龍
紅磡崇安街 18 號
半島廣場 21 樓
2111-2113 室
電話 + 852 2159 5960
傳真 + 852 2773 1090